

# Inside Wallops

National Aeronautics and Space Administration Goddard Space Flight Center Wallops Flight Facility, Wallops Island, Virginia

Volume XX-04

Number 19

June 7, 2004

# Student Scientists Fly High at Wallops

Students from nine states are taking their quest for exploration to new levels, as they launch school science experiments aboard a NASA suborbital rocket on June 9.



NASA Photo

NASA's Orion Sounding Rocket

The single stage Orion rocket will carry the experiments nearly 27 miles above the Earth. During the flight the experiments will be exposed to the rigors of space including temperature changes, radiation exposure and forces 15 times greater than Earth's gravity.

The rocket is scheduled for launch between and 6 and 10 a.m. EDT, from Wallops Island. The backup launch date is June 10. All of the experiments will be recovered and returned to the students a few hours after launch.

"This project allows students of various ages to interact and share the experience of space flight," said Dr. Adena Loston, NASA's Associate Administrator for Education. "With this mission, these young explorers will return to school with a renewed excitement in their studies, which we hope will lead them to careers in science and engineering."

"The students in this program may one day be the scientists and engineers exploring the moon, Mars and beyond", said Lynn Marra, NASA Student Involvement Program (NSIP) manager.

"This is another step for them to apply their skills and knowledge in their exploration quests," she added.

The experiments were designed and built by the students. They will examine interference by space and spacecraft on magnetic measurements; the effect of suborbital flight on living cells; fluid interaction during rocket flight conditions; impact of rocket flight on mechanical devices; the effects of rocket flight on various materials including electronic storage devices; the development of static electricity during the flight on materials; and the ability to communicate with the rocket during flight using cell phones.

"We want the students to be involved in all aspects of conducting a rocket launch," said Phil Eberspeaker, chief of the Sounding Rocket Program at WFF.

"These students are living the life of a 'rocket scientist," he said.

The students are from schools in Georgia, Minnesota, Illinois, Alaska, West Virginia, Massachusetts, New York, Vermont and Connecticut. Four of the participating schools are NASA Explorer Schools.

The launch will be webcast beginning at 5:15 a.m. EDT, on launch day. To view the launch day activities via the Internet, visit:

http://www.wff.nasa.gov/webcast

### Our Latest Retiree



Sandra Savage (above) retired effective June 3 with over 29 years of government service.

Savage came to work for NASA Wallops Flight Facility as a temporary clerk-typist for the Safety & Quality Assurance Engineering Branch, Suborbital Projects & Operations Directorate. She retired as a contracts specialist in the Institutional Contract Section of the Wallops Procurement Branch.

# U-2 Aircraft Operating From Wallops

The United States Air Force's highaltitude reconnaissance U-2 aircraft arrived at Wallops Flight Facility on June 4 to participate in the Combined Joint Task Exercise (CJTFEX) 2004.

The CJTFEX mission includes certification of the JFK carrier group for deployment, conducting interoperability training, joint air assault, airborne operations, amphibious operations, fire support and supporting NATO Treaty combined exercise requirements.

The U-2 is capable of providing continuous day or night, high-altitude, all weather, stand-off surveillance of an area in direct support of U.S. and allied



U2 Aircraft

US Air Force Photo

ground and air forces. It provides critical intelligence to decision makers through all phases of conflict, including peacetime indications and warnings, crises, low-intensity conflict and largescale hostilities.

The U-2 aircraft will be operating out of Building N-159. Employees are permitted to view the aircraft during its staging at Wallops. Photographs may be taken of the aircraft. You must stay outside of the barrier around the aircraft in the hangar.

A single seat, single-engine, reconnaissance aircraft, the U2 flies at high altitudes. A wingspan of 103 feet gives the U-2 characteristics of a glider. It is capable of carrying various sensors and camera.

The U-2 is capable of collecting multisensor photo, electro-photo, infrared and radar imagery, as well as performing other types of reconnaissance functions. It has been used to take various photographs in reconnaissance operations and also in support of disaster relief.

The U-2 is based out of Beale Air Force Base, Calif., and supports various national and tactical requirements from four operational detachments located throughout the world. It will be based at Wallops through June 24.

## Summer in May

By Ted Wilz, Senior Meteorologist

Weather on the Eastern Shore has changed abruptly this spring, going from a wet April with over five inches of rain to a dry May with only 1.56 inches of rain.



The May rainfall amount was less than half our monthly average. Along with the dry weather, we experienced

the second warmest May on record at Wallops Island, which was only exceeded in 1991.

The average daily high temperature was 78.4 degrees and the average low was 60.8 degrees. Temperatures averaged over seven degrees above normal for the month. The temperature reached the 90's twice during May, with a 91 degree reading on the 23<sup>rd</sup>, the warmest day of the month. We also tied a daily record high when the temperature reached 86 degrees on May 15<sup>th</sup>.

July brings average high temperatures in the low to mid 80's with inland locations often reaching well into the 90's. Despite our sea breeze, which keeps our temperatures six to 10 degrees cooler than our inland

neighbors, on occasion we will have an offshore breeze, which pushes the temperature at Wallops into the 90's.

We have reached 100 degrees four times at Wallops, most recently in 1993. On July 10, 1993, temperatures reached an all-time monthly high of 101 degrees. Overnight lows during July average in the upper 60's. The all-time low for July occurred on July 2, 1965, when the early morning low only reached a brisk 51 degrees.

July is not only one of our warmest, but also our wettest month. Summer heat often enhances afternoon and evening shower and thunderstorm development. This afternoon and evening precipitation can drop abundant rainfall in a very short period of time. July rainfall averages 3.56 inches.

There are usually 10 days with measurable rainfall during the month. This amount varies widely. We had over eight inches of rain in 1989, and only .29 inch during the driest July on record in 1993.

Tropical storms and hurricanes also influence the rainfall totals. July will be one month into the Atlantic hurricane season. Although we have escaped Mother Nature's wrath in the past, we still need to remain vigilant and aware of the potential dangers.

# NASA Day At Kings Dominion - July 10, 2004

Adults: ages 13 and up \$31 before July 1 -- \$34 after July 1

Children: Ages 3 to 13 \$25 before July 1 -- \$28 after July 1

Children under 3 free Parking Ticket: \$6.00

Price of ticket includes an all you can eat lunch consisting of:

Roasted Chicken, Hot Dogs, or Hamburgers Rolls Soft Drinks or Iced Tea Ice Cream Fresh Fruit Salad Pasta Salad

Tickets are available at the Exchange Store Building E-2. Call Karen Montross at x2020 for more information

### Verizon Wireless

A Verizon Wireless representative will be on site.



WHEN: Wednesday, July 7

WHERE: Building E-2 Conference Room

TIME: 10 a.m. to 2 p.m.

Stop by the exchange to pick up a list of discounts being offered to Wallops employees.

For more information, contact Karen Thornes at X2040

### Mark Your Calendar

# Eastern Shore Blood Drive

at Wallops July 20, 2004 For further information contact Linda Layton at x1561

# Retirement Planning Workshop for Government Employees

June 16 - 18 9 a.m. - 4 p.m. Building E-2, Conference Room

For more information on this workshop, go to:

http://ohrcoursecatalog.gsfc.nasa.gov/search/description..cfm?course=981

# **Upcoming Training**

## Giving and Receiving Feedback (Brown Bag Seminar)

June 10 11:30 a.m. - 12:30 p.m. Building E-2, Williamsburg Room

#### Learn

- · How to review basic communication principles that apply to feedback sessions
- $\cdot$  How to review and understand the four types of feedback
- · How to review and apply a four-step model for giving constructive criticism
- · How to use best practices for handling difficult feedback situations

Contact Pat Dworske at x2394 to reserve a seat. The Goddard Training Request Form (17-117) is not required

# Introductory Overhead Crane Operator Training

June 9 - 10, 2004 Building N-159 8 a.m. - 4:30 p.m.

This course satisfies the requirements of the NASA Standard for Lifting Devices and Equipment, NASA-STD-8719.9, for the operation of electric, manual or air driven overhead cranes and hoists at WFF. Successful completion of this course, along with a crane operator physical examination (can be obtained at WFF Health Unit) will lead to licensing of the crane operators by NASA.

Contact Bill Hargrove at x1797.

# Giving Successful Presentations

June 16-18 8:30 a.m. - 4:30 p.m. Building E-104, Room 310

#### Learn

- · To establish and achieve precise presentation objectives
- · To analyze your audiences and plan your presentations accordingly
- · To organize material effectively

For registration information, contact Qiuna Harris at x66-3061. For course content information, contact Matt Jarvis at x66-4126.

Inside Wallops is an official publication of Goddard Space Flight Center and is published by the Office of Public Affairs, Extension 1584, in the interest of Wallops employees. Recent and past issues of Inside Wallops also may be found on the NASA Wallops Flight Facility homepage: www.wff.nasa.gov

Editor Betty Flowers Asst. Editor Rebecca Hudson